



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/582,302

06/08/2006

Shinichi Okawa

57800/A400

4987

23363 7590 09/23/2009  
CHRISTIE, PARKER & HALE, LLP  
PO BOX 7068  
PASADENA, CA 91109-7068

EXAMINER

SINGH, SUNIL K

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

09/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,302	<b>Applicant(s)</b> OKAWA ET AL.	
	<b>Examiner</b> Sunil K. Singh	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 42-80 is/are pending in the application.
- 4a) Of the above claim(s) 62, 63 and 76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-61, 64-75 and 77-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/01/07; 6/08/06</u>  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Species C in the reply filed on 07/02/2009 is acknowledged.
2. Claims 62, 63 and 76 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07/02/2009.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 42-61,64-75 and 77-80 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 42 recites the limitation "wavelength" in line 7. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 42-49,54-57,59,60, and 77-79 rejected under 35 U.S.C. 102(b) as being anticipated by Alfano (US 4,479,499).

Alfano discloses a dental device that includes: an instrument (17) having a forward end (19) that is **capable** of being equipped with a diagnostic/treatment tool for treating/diagnosing a lesion in an oral cavity; a light radiating unit (37) having a light source (12) for emitting excitation light and a light source (11) **capable** of emitting illumination light (Fig. 17); wherein the wavelength of excitation light is selected from 405 +/- 50 nm (column 6, line 29); wherein the radiating unit is **capable** of simultaneously radiating excitation light and illumination light (Fig. 17); wherein the illumination light is white light (column 6, line 1); wherein the light sources are laser diode (column 6, lines 1-4); wherein the light source is capable of variably adjusting a light emission level of the light source (via filters and choppers); wherein the radiating unit is capable of radiating light at one wavelength by switching between the plurality of light sources; wherein the light source is selected from halogen lamp (column 8, lines 31-32); wherein the light radiating unit includes an optical filter (13); wherein the light's wavelength is capable of being selected by replacing filter with another filter having different characteristics; wherein the radiating unit (37) includes a radiating part from which excitation light and/or illumination light are radiated toward the lesion (Fig. 17); wherein the radiating part is capable of being disposed near a mounting portion of the diagnostic tool; wherein the device includes a power supply for driving the light sources (column 6, line 5); wherein the light emitting devices are capable of being mounted so as to encircle the diagnostic/treatment tool.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 50-53,58 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alfano (US 4,479,499).

Alfano discloses the invention substantially as claimed except for a device that includes a plurality of light sources for emitting excitation light and a light source for illumination. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alfano to include an extra light source for emitting excitation light, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. See *St. Regis Paper Co. v. Bemis Co.* 193 USPQ 8.

10. Claims 61 and 64-75 rejected under 35 U.S.C. 103(a) as being unpatentable over Alfano in view of Nakanishi (US 6,607,384).

Alfano discloses the invention substantially as claimed except for a detachable adapter having LEDs and a filter.

Nakanishi teaches a detachable adapter (60,50) that includes various LEDs. It would have been obvious to modify Alfano to include the claimed adapter, as taught by

Art Unit: 3732

Nakanishi, since such a device is well known in the art. Furthermore, it would have been obvious to one having ordinary skill in the art to modify Alfano/Nakanishi to include an adapter with filters in order to filter out light from the LEDs in Nakanishi's adapter.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday (Increased Flex Schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/582,302

Page 6

Art Unit: 3732

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/22/2009

/Sunil K Singh/  
Examiner, Art Unit 3732

/Ralph A. Lewis/  
Primary Examiner, Art Unit 3732